

REFERENCE MARKS IN THE DRAWINGS

[0049]	1 Manipulator
[0050]	11 Connecting port
[0051]	12 Base
[0052]	13 Rotary part
[0053]	14 Lower arm
[0054]	15 Upper arm
[0055]	16 First wrist arm
[0056]	17 Second wrist arm
[0057]	18 Wrist flange
[0058]	19 Coil spring
[0059]	20 Protection member
[0060]	21, 25 Hollow part
[0061]	23 Intermediate part
[0062]	24, 48 Fixing member
[0063]	31 Laser machining head
[0064]	32, 33 Servomotor
[0065]	43 Conversion fitting
[0066]	45 Battery card
[0067]	51 Robot controller
[0068]	52, 54 Cable
[0069]	55, 56 Cooling hose
[0070]	J1-J6 Rotating axis
[0071]	100 Laser machining robot

1. A laser machining robot comprising:
 - a manipulator;
 - a robot controller for controlling operation of the manipulator; and
 - a laser machining head mounted to the manipulator and scanning a laser beam,
 wherein the laser machining head includes a servomotor for driving an inclined parallel plate for scanning the laser beam, and
 drive of the servomotor is controlled by the robot controller.
2. The laser machining robot of claim 1, further comprising:
 - a motor control line connecting the servomotor to the robot controller for controlling the servomotor; and
 - a first cable connecting the manipulator to the robot controller for operating the manipulator,
 wherein the motor control line and the first cable are grouped into one.
3. The laser machining robot of claim 2, wherein a part of the motor control line goes through inside the manipulator.
4. The laser machining robot of claim 2, wherein each of the servomotor and the motor control line is one of a

plurality of servomotors and motor control lines, and the number of the servomotors is identical to the number of the motor control lines.

5. The laser machining robot of claim 2, further comprising a second cable connecting the manipulator to the robot controller for controlling operation of the manipulator,

wherein one of the first cable and the second cable is a power supply line for supplying electric power to the manipulator, and

an other of the first cable and the second cable is a signal line for controlling operation of the manipulator.

6. The laser machining robot of claim 1, wherein the laser machining head is mounted to the manipulator so that the servomotor is disposed on a side of the manipulator.

7. The laser machining robot of claim 1, further comprising:

a cooling water hose connected to the laser machining head, and supplying and discharging cooling water; and
 an air hose connected to the laser machining head and supplying a shield gas,

wherein the manipulator is of a vertical multi-articulated type having six rotating axes,

the manipulator includes a cable guide disposed along a fourth rotating axis and a sixth rotating axis from an installation surface of the manipulator, and

the motor control line, the cooling water hose, and the air hose are disposed in the cable guide.

8. The laser machining robot of claim 7, wherein the cable guide is a coil spring.

9. The laser machining robot of claim 1, further comprising a cooling water hose connected to the laser machining head for supplying cooling water,

wherein a diameter of the cooling water hose on a side of the laser machining head is smaller than a diameter of the cooling water hose on an opposite side of the laser machining head.

10. The laser machining robot of claim 9, wherein the cooling water hose includes a first cooling water hose, and a second cooling water hose connected to the first cooling water hose at one end and connected to the laser machining head at an other end, and

a diameter of the second cooling water hose is smaller than a diameter of the first cooling water hose.

11. The laser machining robot of claim 1, wherein the manipulator is operated by a servomotor of a type identical to that of the servomotor but having a different output capacity.

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